gas in the bowels, where really little or no gas exists. There are various back pains, palpitations, faint and sinking feelings, and a general mental unrest and apprehension.

It is apparent, therefore, that surgery, local colonic irrigations and treatment, and systemic enteric therapy have little or no place in the management and treatment of this group. As Ralph Brown has said:

"The irritable colon will tax the therapeutic endeavors of the internist to the utmost, but rarely should he call upon the surgeon for assistance."

A discussion of proper therapy cannot be undertaken in this space, but it should include direction of the individual as a whole, control of the nervous system, much reassurance, and the proper regimen of diet and bowel management.

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R. MANNING CLARKE, M. D. (319 Hollingsworth Building, Los Angeles).—I have long been impressed with the importance of the control of the motility of the colon as an important weapon in combating clinical symptoms in functional derangement, so-called. It is interesting to note that in the literature there is an increasing tendency to give this importance in discussions. Doctor Gilbert says: "If we have succeeded in conveying to you the suggestion that the study of the general motility of the bowels may be of more importance than the looking for organic defects, possibly surgical, we have accomplished our purpose." With this I can heartily agree, with the exception of gross pathology, which we know markedly influences the motility and general functions of the tract, such as severe inflammations of the appendix, gall bladder, and pelvic lesions.

Too little attention has been paid to the rôle of disturbed motility, especially in history taking. The patient with two or three loose bowel movements daily, feeling that "his elimination is perfect," will answer questions in generalities that put the history taker off his guard unless he thoroughly understands its importance and insists on details. The motility from this patient's tract needs to be controlled. He needs to be eating a little less bulk and residue, a little more concentrated diet that will quiet his movements down to *one formed stool a day.* Oftentimes many of his symptoms will disappear and he will be saved an operation for gall bladder or appendix or other condition which never existed.

It is, of course, necessary, as the doctor points out, that the ameba and many other parasites and microorganisms be ruled out, and I feel that too little attention is paid to stool analysis and study. It is important, as the doctor has stressed, that the stool be looked over in a fresh condition, by yourself or by trained assistants under your direct charge, in order that proper conclusions may be arrived at. To send one or two stools to a distant laboratory that is not interested in this particular matter is, to me, as good as useless.

Along with these motor changes discussed by Doctor Gilbert there are many reflexes that arise which are of the utmost importance. My article published in CALIFORNIA AND WESTERN MEDICINE, October 1926, makes clear the importance I attach to them.

It is hardly possible to agree with Doctor Gilbert's statement as to how pain in the hollow viscera is caused. The work of Meltzer, as well as Bayless and Starling, I think pretty thoroughly cleared up the matter that pain is a muscle sense in the hollow viscera, and that it is caused by its disturbance, mainly distention. After the pronouncement of the "law of the intestine" by Bayless and Starling, and later the "law of contrary enervation" by Meltzer, I had felt that all controversy regarding the cause of pain had been done away with; but I see there still is a divergence of opinion.

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JOHN V. BARROW, M. D. (701 Westlake Professional Building).—I have been very much interested in Doctor Gilbert's presentation of the mechanism of the bowel movements. From clinical experience the origin of their nerve stimulus could well be located in the hepatic flexure, or, probably better, in the cecum itself. The appendix may have a very marked influence on the initiation of peristaltic waves. The sigmoid and rectum certainly seem to receive a great deal of inhibition from the mechanical stimulus of these two areas.

Long chronic infection undoubtedly destroys the protective mechanism of the mucous membrane of the colon, and an old chronic ulcerative bowel readily absorbs unsynthesized protein material, bacteria, and protozoa.

PELLAGRA*

By GORDON E. HEIN, M. D.
AND
JOHN MERRILL, M. D.
San Francisco

DISCUSSION *by George Dock, M. D., Pasadena; Fred B. Clarke, M. D., Long Beach.*

THE oft-held viewpoint that pellagra is a concomitant of poverty, crowding, poor hygiene and food, would lead one to believe that it should be uncommon in California, with her ample land, relative freedom from crowding, and abundance of green vegetables almost the year round. Yet, in the past few years at the San Francisco Hospital an increase has been noted in the number of patients presenting the clinical syndrome known as pellagra. This study covers patients who gave a history of onset after an alcoholic debauch or prolonged alcoholism, as well as those with a history of dietary deficiency from other causes. Only patients who have had at least three of the major signs, symmetrical dermatitis, sore tongue, diarrhea, or changes in the central nervous system, have been included in this report. Patients who presented questionable dermatitis, or some of the symptoms of the pellagra syndrome, were probably true cases of milder type and would have raised the incidence materially, but they were excluded.

Admissions of pellagrins to the San Francisco Hospital show a definite rise. The diagnoses were all made by the same men. Since the clinical picture is so striking, we feel that a true increase is represented. An almost parallel increase is noted in the number of cases recorded by the State Board of Health of California, as indicated in the following table:

TABLE 1.—*Showing Incidence of Pellagra in Different Years (Not Including Recurrences)*

Year	San Francisco Hospital	State of California Board of Health
1918	3	—
1919	1	—
1920	1	16
1921	0	21
1922	1	32
1923	0	42
1924	3	38
1925	9	63
1926	13	58
1927	7	45

PREDISPOSING FACTORS

Since 1924 we have observed twenty-nine cases on the medical service of the University of California at the San Francisco Hospital.

* From the Department of Medicine (San Francisco Hospital), University of California Medical School, San Francisco.

* Read before the General Medicine Section of the California Medical Association at its Fifty-Seventh Annual Session, April 30 to May 3, 1928.

Sex.—The syndrome affected men more commonly than women in the proportion of about 18:11.

Age.—Broadly speaking, the disease was found in persons over forty-five years of age, although the youngest patient was seventeen years old and the oldest sixty-seven years. In this very small series the women were younger than the men, but this is probably a coincidence.

Residence.—All but two had been in the city of San Francisco for a period of at least two years and approximately two-thirds had been here for twelve or more years. One of the two had lived in California for seven years, the other for twenty years. This is of interest because of the seasonal variations in the syndrome and because in San Francisco the changes in temperature with the various seasons are not marked. Moreover, although cool the year round, fresh vegetables are available throughout the year.

Nativity.—Twelve of the patients were native Californians; eight were born in other states, two in Canada, three in Ireland, two in Italy, one in Hungary, and one in Spain. Missouri, Tennessee, Kentucky, Maine, Washington, West Virginia, Georgia, and Pennsylvania supplied those not born in California. The large number of Irish people represented was surprising. In ten cases both parents were born in Ireland and in two others one of the parents was Irish. A large number of people of Irish extraction are admitted to the hospital, and during the month of January 1926, sixty-seven patients with both parents of Irish birth, and thirty-one with one parent of Irish birth were admitted, which is 13 per cent of the number admitted, as compared with 34 per cent of Irish pellagrins. The rest were of English, German, Spanish, or Italian descent although all were born in the United States.

Type of Quarters.—As would be expected in a group of people in a charity hospital, the majority came from two localities where the dwellings were poor and quarters were not the best. About one-third came from rooms in cheap hotels or rooming houses, some from flats where they had been living, and in a few instances it was impossible to find where the patients had been. A few came from parts of the city where there is little crowding. Only two came from the same address, that of a cheap hotel in the poorer section of the city. Both patients were there in 1926, one in April and one in September. Two had been in the county jail, one only two days and the other two weeks, with an interval of nine months supervening.

Occupation.—Five of the eleven women were married and worked at home, three others did housework, two were filing clerks, and one worked as a candy wrapper. The wages of those who worked were very low.

Four of the men were laborers working where they could, but varied occupations were followed by the rest. A hospital orderly, clerk, waiter, real estate agent, cabman, street-car conductor, two stevedores, teamster, moulder, carpenter, butcher, cigar-box maker, and boilermaker were represented.

Diet.—It was hard to gain an accurate conception of the diet before the onset of the illness. As a whole the diets were unsatisfactory. Meat was eaten sparingly by the majority. Green vegetables were reduced in the food almost as often as meat. In a few instances the diet seemed sufficient and other people on the same food did not become ill.

Instances of markedly deficient diets were obtained. A girl had been told she was gaining weight (she then weighed 125 pounds). She voluntarily starved herself, her diet consisting principally of pastries in small amounts. On admission to the hospital she weighed sixty-two pounds, had dermatitis of the hands and feet, sore tongue, diarrhea, and mental changes so extreme as to necessitate forced feeding. Another woman, because of lack of money, had deprived herself of proper food for over a year. She had eaten small amounts of bread, water, eggs, and milk, but had eaten almost no meat nor vegetables. Two of the women in the group stated that they were accustomed to take one or two glasses of unboiled milk daily, and three others used small quantities of milk.

It was felt that probably unmarried men as a whole had a less balanced diet than married ones, and of the group of eighteen, fourteen were bachelors, two were separated from their wives, and only two were married. Of the women, one was single, five married, three were separated, and two were widows.

Alcohol.—Alcoholic excess was common and apparently often a precipitating factor. Seventeen of the men and seven of the women gave a history of excessive use of alcohol. One man stated that he used it "moderately," but went on occasional sprees. As a rule, the alcohol was taken in the form of "moonshine," but two patients had taken ethyl alcohol diluted with methyl and both had well-marked optic neuritis. Another had been taking four bottles of Jamaica ginger daily. The impression gained was that a considerable number were recovering from acute prolonged intoxication and several were on the verge of delirium tremens. Two women denied using alcohol and no evidence that it had been used was obtained.

The rule was that illness followed "sprees" at a time when alcohol formed the chief article of food, although "alcohol" may have been acting on the intestinal tract or whole body over a prolonged period.

Operations.—Three men had had operations on the gastro-intestinal tract; one had a gastrostomy with retrograde dilatation of the esophagus for stricture following a suicide attempt; the other two had had gastro-enterostomies, one ten years before for peptic ulcer, the other in 1916 for a similar condition. All were users of large amounts of alcohol. At present we have under observation a patient with gastric ulcer who developed severe pellagra while receiving jejunal feeding following operation in 1922. He recovered and has had no recurrence of any symptoms since, although he still has symptoms of ulcer.

Season.—The majority of patients were admitted to the hospital during the months of April

and May and July and August, in the following numbers:

Jan.	Feb.	March	April	May	June
3	0	2	3	5	3
July	Aug.	Sept.	Oct.	Nov.	Dec.
6	4	1	3	1	2

(Including reëntries.)

As near as could be determined, the month of onset was as follows:

Jan.	Feb.	March	April	May	June
1	1	1	6	3	3
July	Aug.	Sept.	Oct.	Nov.	Dec.
3	3	0	2	1	1

In seven instances the history of onset was completely unreliable.

Symptoms.—Sore mouth and diarrhea caused most of these patients to seek relief, two came because of pains in the arms and legs, one was apprehended because of his mental state, and two were brought in because of acute alcoholic intoxication.

Dermatitis.—The dermatitis uniformly affected the hands; it was symmetrical, most often over the back, and we could see no difference in cases where it had followed an alcoholic debauch and where a history of deficient diet was obtained. Lesions on the feet were present in three instances. One of the three had used alcohol extensively, one moderately, and one not at all. Sometimes the skin changes appeared late in the disease.

J. K., aet. forty-six, had a gastro-enterostomy ten years ago, which was still functioning. He had had severe attacks of diarrhea intermittently for the same period. He had been drinking four bottles of Jamaica ginger daily for some time before entry. There existed severe diarrhea, a very sore tongue with exudate under it, abdominal pain, but no dermatitis. The patient remained in the hospital under observation from June 14, 1926 to September 15, 1926, without any skin lesions occurring. He was transferred to the Laguna Honda Home with a diagnosis of pellagra without skin changes. After ten days he was sent to the University of California Hospital, now showing a severe symmetrical dermatitis of both hands. The dermatitis persisted up to his death two months later.

The skin of the neck was pigmented or thickened in four of the twenty-nine patients. The genitalia showed involvement, more commonly among the women, six of eleven having an inflammatory lesion of the vulva and vagina, while only two of eighteen men had a dermatitis involving the scrotum. No relation seems to exist between the severity of the dermatitis and the termination. Two of the patients with extremely severe dermatitis recovered while several with moderate skin changes died. The dermatitis in the group taking alcohol was fully as extensive and severe as in the group where a history of deficient diet was obtained.

The lesions varied from mild, symmetrical, sharply limited inflammatory lesions to bullae formation and extensive exfoliation. Hypertrophy of the skin and pigmentation, particularly at the borders, were noted, as was late atrophy. In some instances the skin seemed to return to normal as far as could be determined by inspection. It cleared up in several patients long before the pain in the extremities disappeared. Most of the patients expiring with the syndrome had dermatitis at the time of death, but in one the skin was normal when lethal exitus occurred.

Gastro-intestinal.—Symptoms associated with the gastro-intestinal tract were most distressing, exceeded only by the pains suffered in the extremities. A sore, inflamed tongue was present in every case but three. The most common type consisted of a deep red, smooth, sometimes fissured tongue, not particularly swollen but very shiny with patches of whitish exudate on the under surface. Papillae could not be seen. With recovery the tongue regained its normal appearance.

Diarrhea was present in all but three cases and usually was painless. There was one marked exception, however.

J. K. had periods when he had almost continuous excretion of fluid feces. At intervals he was better, but he always had diarrhea and always pain and tenesmus. He had had a gastro-enterostomy ten years previously, which was still functioning, and he also had drunk four bottles of Jamaica ginger daily. Diarrhea had begun two days before admission and persisted to death, which occurred after five months.

However, patients with extremely severe diarrhea recovered.

The sore mouth and diarrhea often disappeared before either the skin or nervous system manifestations had showed any change.

Gastric analyses were performed in eight cases, but in one of these only one estimation was made. Free hydrochloric acid was absent in six of the eight examinations, it was decreased in one, and was as high as forty in another. The patient with the high acidity was a woman with dermatitis, diarrhea, and sore tongue who, due to lack of money, had starved herself following her husband's death. She had used no alcohol as far as could be learned. All of those patients in whom the free hydrochloric acid was absent had been heavy users of alcohol. The feces were examined for blood in only eight patients, with negative results in five and blood showing in three. In one of the three the blood may have come from hemorrhoids. No investigations for photodynamic fungi were attempted.

Weight.—Loss of weight at times was extreme. One patient weighing 125 pounds dropped to 62 in three years, another lost 32 pounds in six months, and one lost 20 pounds in three months. A man weighing 138 pounds on entry lost steadily for two and one-half months to 115 pounds, remained constant for five weeks, and then gained weight at the rate of one pound daily for twenty-one days, gaining more slowly thereafter.

Nervous System.—Involvement of the nervous system was hard to estimate. The similarity of the changes in pellagra to those following alcohol poisoning, both central and peripheral, with the frequent history of indulgence in the latter made it impossible to determine which factor was playing the major etiologic rôle.

Mental deterioration varying from moderate mental slowing to definite delusions was noted in seven of the twenty-two patients. Six had marked hallucinations, chiefly visual. Those with hallucinations had tremor and looked like alcoholic patients with delirium tremens, which they may have been. Of six with hallucinations, four

died, although one who had both hallucinations and delusions recovered and was still well five months after leaving the hospital. Mental deterioration seems to carry with it a more serious prognosis than diarrhea or dermatitis.

Over one-half of the patients had pain in the legs, as a rule described as burning, but sometimes as tingling or aching, with occasional attacks of sharp, stabbing pain. It was not controlled by ordinary measures such as heat, acetylsalicylic acid, salicylates, cinchophen, or codein. Heat made it decidedly worse, and it was a common experience to find patients with their feet uncovered and hanging over the edge of the bed in order to get relief. Ice bags or cold water did not help. The pain at first was often continuous with exacerbations, but as the individual improved, it came on in attacks lasting from minutes to hours. As is often the case, it was distinctly worse at night.

Unfortunately the duration of the pain was sometimes for months, and long after the sore tongue, diarrhea, mental symptoms, and dermatitis had disappeared it persisted to make the patients miserable. It was present in three patients who died, but was extremely severe and persistent in some that recovered. In itself it seemed to have little prognostic significance. Occasionally it was also present in the upper extremities.

One man had tuberculosis and, following drinking "moonshine," developed dermatitis, diarrhea, sore mouth, and pain in the legs. His patellar reflexes disappeared and he apparently recovered after one and one-half months, the pain being the last to disappear. A year later he was taken to the San Francisco Tuberculosis Hospital, where no evidence of return of pellagra was noted with the exception of persistently absent patellar and Achilles reflexes, which may have been the result of alcoholic poisoning. He died from pulmonary tuberculosis one year and two months later, and during this period before his death he had no symptoms or signs suggesting pellagra.

Blood.—A mild secondary anemia was the rule, although both hemoglobin and red cells remained high in a few cases. Leukocytes were more often around 9,000 to 11,000, but varied from a distinct leukopenia of 3,650 to a leukocytosis of 26,000.

In two cases where the anemia was marked the color index was well above one, and white cells were decreased, the blood of both patients resembling that of a man described by Koessler.

Of the two patients in whom the anemia was marked, one died, the other recovered. As has been noted and confirmed more recently by Huck, eosinophilia is not uncommon, and with improvement the eosinophils increased in number. We found eosinophils present in the blood smears taken when the patients were admitted in slightly over one-half of our patients. As a rule, those with eosinophilic polymorphonuclear cells recovered although three who showed this type of cell early, died later, and, as Huck has so clearly pointed out, one must remember that the blood changes with the progress of the disease.

It was noted that the finger nails were curved in the long diameter in six men and in one woman, but the presence of pulmonary emphysema in two, and pulmonary tuberculosis in the third were adequate in explaining the shape of the nails. In the other four patients no satisfactory cause of the curving was evident.

MORTALITY

Twelve of the twenty-nine patients died. Two of them died of pulmonary tuberculosis and neither of these had symptoms or signs of pellagra at the time of death. In ten, pellagra and alcoholic poisoning were the chief factors in causing exitus. All had received a high caloric and high protein diet which contained a satisfactory vitamin content. One, in addition, had received a proprietary mixture supposedly high in vitamin content. In his own words, he attributed his trouble to "too much booze," as was not unusual among this group. Autopsies were done on three dying of alcoholism and pellagra. The results were disappointing. Edema of the meninges was noted twice, but otherwise the central nervous system was considered negative by the examining pathologist. A subepithelial infiltration of lymphocytes and plasma cells was found in the tongue in two cases. The rest of the gastro-intestinal tract was negative, with the usual methods of examination.

RESULTS IN THOSE RECOVERING

One woman (A. M.) returned one and one-half years after her original illness with pellagra, insisting that she had taken no alcohol in the interim.

After one and one-half years the girl (M. N.) who had starved herself to render herself thin returned with mental symptoms, but no dermatitis and no gastro-intestinal involvement.

An Italian who had very definite symptoms returned in thirteen months with advanced tuberculosis from which he died. There was no recurrence of pellagrous symptoms.

One woman (B. S.) had a recurrence following an alcoholic debauch.

A man (G. O.) was admitted to the hospital for the third time since June 1926. He had stricture of the esophagus, and used both methyl and ethyl alcohol. He had very severe neuritis, dermatitis, sore tongue, and diarrhea. Since leaving he insists that he has not used alcohol in any form. He has had no recurrence of the dermatitis, nor of the sore tongue, or diarrhea. The first reëntry was because of a peripheral neuritis with wrist drop and a trophic ulcer. The second was for trophic changes in the feet.

We have at present under treatment a man who had pellagra in 1922 following a gastrojejunostomy with jejunal feeding. He has had no recurrence since 1922.

One other man had pellagra while in Arkansas thirteen years ago. He has had repeated recurrences each spring, marked chiefly by the dermatitis. Prior to the first attack, he had taken from one to three quarts of whisky daily for three years and had been on a three-day spree one week before the onset. He has not drunk liquor since. On his present entry, thirteen years later, he had a scaling dermatitis of the backs of both hands

which disappeared after a few days of general diet, supplemented by lemon juice.

CONCLUSIONS

1. Pellagra is relatively common in San Francisco. More cases were seen in 1925 and 1926 than in previous years.

2. A deficient diet seems to be the most common etiologic finding. Unmarried men, probably because of this, are more commonly affected.

3. Alcoholism seems to be a predisposing factor in the majority of cases.

4. No difference could be detected between those cases with a history of alcoholism and those with no such history.

5. Gastro-intestinal disease may be a predisposing element.

6. The majority of patients first had symptoms in the spring (April), although little change in temperature occurs with the change in seasons. The character of the sunlight may be different in spite of the even temperature.

7. The syndrome is more common among the Irish people of San Francisco.

San Francisco Hospital.

DISCUSSION

GEORGE DOCK, M. D. (94 North Madison Avenue, Pasadena).—In the unsettled condition of the etiology of pellagra this paper is timely and should excite the interest of health officers and practitioners. If twenty-nine typical cases could be observed in one hospital in three years there must have been many atypical cases, and family physicians, dermatologists, and neuropsychiatrists could with advantage review their case histories and see how many pellagrins were given erroneous diagnoses. The figures given are no cause for alarm, but at the same time show the existence of a promising field for investigation. The alcohol factor is a most interesting one, and the more or less concealed use of alcohol indicates a need for a more careful scrutiny of its possible effects. Alcohol, of course, is used in its popular and not its chemical meaning. In all future cases giving such histories the conditions previous to the supposed onset should be carefully investigated. Relatives and neighbors living under similar conditions should be sought out, examined and tabulated. There is also material for study in the large number of people who live on irrational diets, as many do for various reasons—financial, cosmetic, and other. The study should include cases of pellagra occurring in people in living conditions superior to those in the group reported. The paper should be carefully studied by all physicians and the diagnostic suggestions born in mind at all times.

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FRED B. CLARKE, M. D. (1006 Pacific Southwest Building, Long Beach).—Alcohol seems to have been a contributing factor in the development of pellagra in the cases described, and one might reasonably conclude that anything that interferes with normal digestion and assimilation is of decided importance in the development of this syndrome, as this condition has been known to occur in patients with disease of the gastro-intestinal tract (carcinoma, etc.) when the lesion is sufficiently widespread to interfere with digestion.

In Italy, where this disturbance has been prevalent for years, the diet of the peasants is polenta, a thick gruel made from cornmeal. This item of diet is made up in large quantities at a time and quickly becomes fermented, but the family continue to eat this from day to day until the supply is exhausted. One might reasonably suppose that eating of polenta after fermentation might be a contributing factor in the cause of such a widespread condition in that country.

Casal in the seventeenth century stated that pellagra was a disease of the poor and undernourished and also the result of dietary deficiency. Zannetti, Marzari, Lombroso, and many others who have devoted years to the study of this disease reached a similar conclusion. Lombroso stated that if individuals could select their diet, pellagra would disappear.

In our own country, Goldberg has shown that dietary deficiency has resulted in pellagra, occurring in the institutions of the South, and that by improving the dietary they were able to prevent the occurrence of pellagra in one institution, where two hundred and thirty-four cases occurred the year before.

Sambon, Joslin, Peterson, and others believe that there is a specific etiological factor, probably an infection which is communicated from one individual to another, and there is the additional evidence of the Thompson-McFadden Pellagra Commission to support their view, but at the present time the majority of men believe that this disease is due to dietary deficiency, whether lack of fat soluble A, water soluble B, or both, or a too low proteid.

In the year 1910 there occurred in the Cook County Institute at Dunning, Illinois, sixty-five cases of pellagra. These cases were studied by Pollock, Dick and Clarke, and their observations were published in the *Journal of Infectious Diseases*. It was concluded by them that the diet in their institution was insufficient and the diet was increased by the addition of cereals, beans, peas, and meat, with the result that there was a decided decrease of the disease in the institution the following year. This method of increasing the diet was utilized by other institutions in Illinois, where there were approximately four hundred and fifty cases of pellagra in 1910, with satisfactory results in lessening the occurrence. The factor of alcohol was not considered as having any bearing on pellagra in the Illinois institutions, as these patients to a large extent had been inmates of the institutions for quite a period of time before becoming ill.

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DOCTOR HEIN (closing).—In conclusion I wish to acknowledge indebtedness to Doctors Leroy Briggs, E. R. Twitchell, and E. Bruck for cases seen in their wards at the San Francisco Hospital.

ALLERGIC RHINITIS*

By H. P. MERRILL, M. D.
Los Angeles

DISCUSSION *by Simon Jesberg, M. D., Los Angeles; Cullen F. Welty, M. D., San Francisco; Albert H. Rowe, M. D., Oakland.*

ALLERGIC rhinitis is a recurrent or practically constant disturbance in which the mucous membrane of the nasal cavity becomes turgescent and pours out a large amount of watery secretion. It is not a disease entity, but a local manifestation of a general hypersensitiveness to irritants, generally proteins, but probably to other substances as well. It is often accompanied by other types of allergic reaction, such as asthma, and like such must be considered as a symptom and not as a disease.

It is not the purpose of this paper to discuss asthma and hay fever, but to direct attention again to cases which have been classed as neuroses, vasomotor rhinitis, and hyperplastic rhinitis by the rhinologist, and which by the allergists have been considered a minor part of a general reaction. The members of this group have been mentioned as preasthmatic conditions by some authors and their study and prompt recognition as such has been urged. Early diagnosis and proper treatment

*Read before the Eye, Ear, Nose, and Throat Section of the California Medical Association at its Fifty-Seventh Annual Session, April 30 to May 3, 1928.